

# 2013 UDOT RESEARCH PROBLEM STATEMENT

\*\*\* Problem statement deadline is March 25, 2013. Submit statements to Steve Bagley at [sbagley@utah.gov](mailto:sbagley@utah.gov) \*\*\*

**Problem Title:** Knowledge Management by Peer Exchange

**No. UT-13.05.05**

**Submitted By:** Jeannine Wirth

**Organization:** RiversQuest Consulting

**Email:** [jwirth@riversquest.com](mailto:jwirth@riversquest.com)

**Phone:** 406-260-5037

**UDOT Champion (suggested):** Cameron Kergaye

**Select a Subject Area**

☐ Materials/Pavements

☐ Maintenance

☐ Traffic Mgmt/Safety

☐ Geotechnical

☒ Preconstruction

☐ Planning/Asset Mgmt

☐ Transportation Innovation

## 1. Describe the problem to be addressed.

One of the most effective and efficient sources of sharing knowledge is a peer network. Travel opportunities, especially for technical level staff, have been severely limited to conserve state and federal budgets. Technology is now readily available to facilitate conversations and knowledge sharing across state boundaries without travel. New networks and programs need to be established to support and facilitate sharing of lessons learned, innovative techniques in progress and other valuable knowledge continually being developed by state DOTs. A peer knowledge exchange network between several states is an essential tool for keeping up with rapidly changing technology and processes.

## 2. Describe why this research is important and how it is unique.

Sharing knowledge and innovations is a powerful method to leverage limited resources and avoid duplication of effort. We will use existing technology to inexpensively gain knowledge and avoid failures and pitfalls discovered by others. Peer knowledge sharing is a unique and efficient way to maximize the use of public funds and strengthen cooperation and collaboration between states. Peer cooperation and collaboration will help state personnel increase their efficiency at little extra cost. Every state has processes, materials and technology use that is applicable to other states. Sharing this information through presentations by the subject area experts with other participating states would reduce duplication of effort and inspire further innovation.

## 3. List the research objective(s) to be accomplished:

1. Establish peer knowledge management and exchange on a variety of technical innovation topics
2. Create a low-cost information exchange program that can be replicated and expanded across state and federal boundaries.
3. Leverage limited resources by sharing knowledge with peers and technical experts.

#### 4. List the major tasks to accomplish the research objective(s):

1. Obtain participation of 6-10 western state DOTs.
2. Establish preliminary list of 5-10 discussion topics.
3. Set agenda for first four quarterly meetings of two year process.
4. Research current topics of interest and find subject matter experts able to present valuable information to participants.
5. Develop, post and advertise agenda and calendar for knowledge exchange discussions.
6. Gain commitments from subject matter experts to present each topic and invite key people to participate.
7. Moderate each event to stimulate active discussion, record key information and disseminate it to network members.

#### 5. List the deliverable(s) to come to UDOT from this research study:

1. Membership in a valuable knowledge sharing peer network.
2. Tested innovations from other states to incorporate into projects and processes.
3. Recognition for innovations and enhanced cooperation with other agencies.
4. Knowledge management system for technical innovations.

#### 6. Describe how the results of this study will be implemented at UDOT.

Identify innovations to adopt in UDOT processes or project  
Have conversations with representatives from 6-10 other states about current innovations

7. Estimated cost - Total: \$72,000

UDOT Share: \$12,000

Other/Matching Funds: \$60,000

### **8. Outline the proposed schedule for this study, including estimated start date, duration, and major event dates.**

June - August, 2013: Research innovation topics and subject matter experts for group conversations. Enlist states to participate and provide their share of funding. Set first year schedule and agendas.

September 2013 - First quarterly two-hour meeting (virtual) for peer exchange

December 2013- Second quarterly meeting (virtual)

March 2014 - In-person meeting to strengthen relationships and knowledge exchange between peers including a site visit of the current discussion topic

June 2014- Fourth quarterly meeting (virtual)

September 2014 - Fifth quarterly meeting (virtual)

December 2014 - Sixth quarterly meeting (virtual)

March 2015 - Second in-person meeting

June 2015 - Virtual meeting to discuss a current innovation and next phase for the project.